

LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES



**OFFICE OF FISHERIES
INLAND FISHERIES SECTION**

PART VI –C (ARCHIVES)

WATERBODY MANAGEMENT PLAN SERIES

COCODRIE LAKE

**AQUATIC VEGETATION TYPE MAPS
AND NARRATIVES**

Cocodrie Lake vegetative narratives and type maps.

State of Louisiana



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COCODRIE LAKE TYPEMAP
8/21/94

A survey was made of Cocodrie Lake in Rapides and Evangeline parishes on September 21st to evaluate aquatic weed infestations. The major boat lanes and most of the shoreline areas were open to boating and fishing. Problems were found in the shallow water bay and cypress-tupelo swamp areas.

The cypress-tupelo flooded sections on the east end of Cocodrie Lake had a severe infestation of water hyacinth. In this part of the lake, duck hunters seemed to be affected most by the dense growth of plants. Hyacinth also lined the channel from Johnson's Landing to the dam along Hwy. 147.

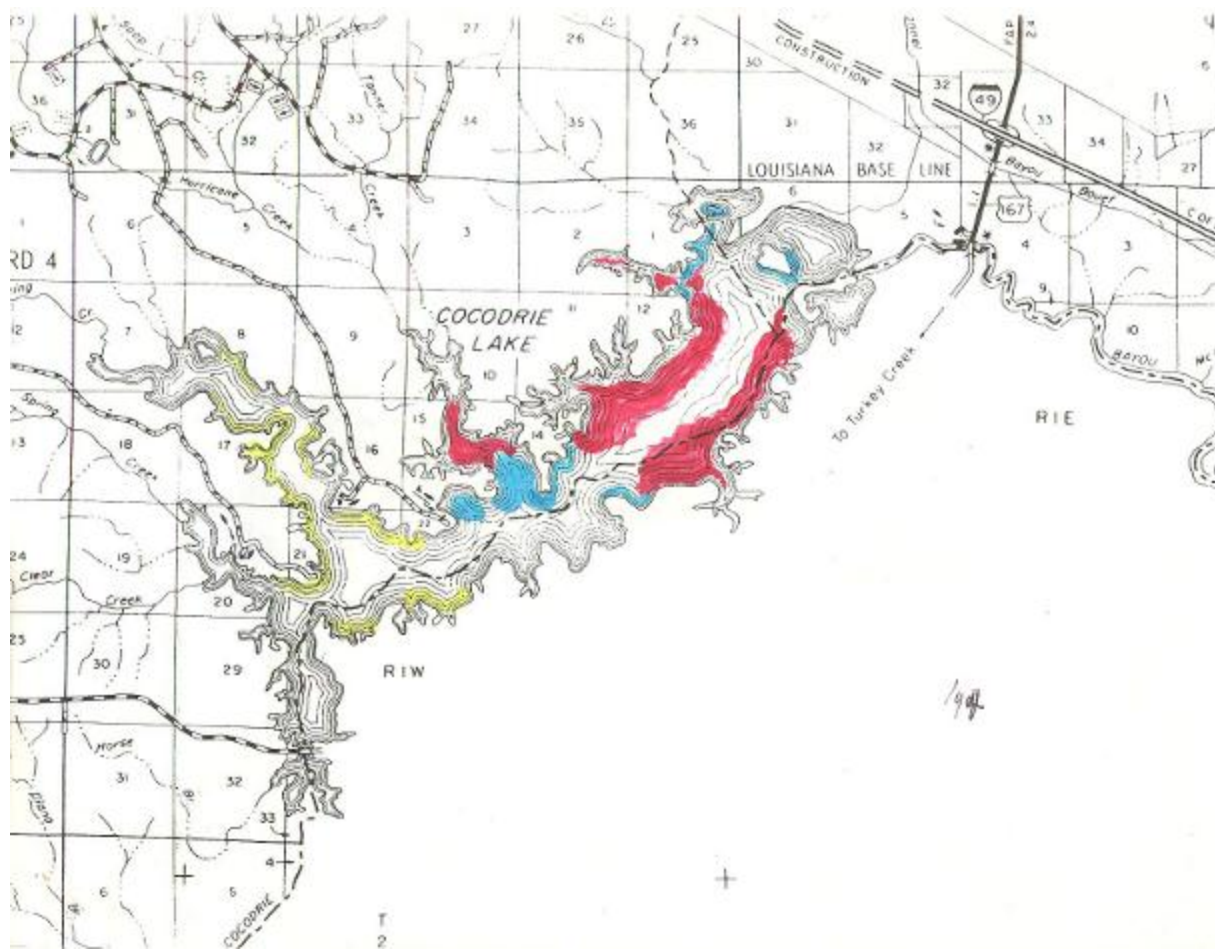
The bay waters on the north side of Cocodrie Lake had a moderate to severe infestation of cabomba, coontail, and bladderwort restricting boating and fishing in those areas.

In summary, a significant portion of Cocodrie Lake was open to water related recreation. The major hyacinth problems were in remote sections of the swamp where water depths ranged two to three feet and the bottom was littered with tree stumps, limbs, and other debris making travel by conventional boat almost impossible. Submerged weed problems were light along the shoreline and no water hyacinth plants were found in the western one-half of Cocodrie Lake.

Mark F. Feltner

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COCODRIE LAKE TYPEMAP
October 19, 1995

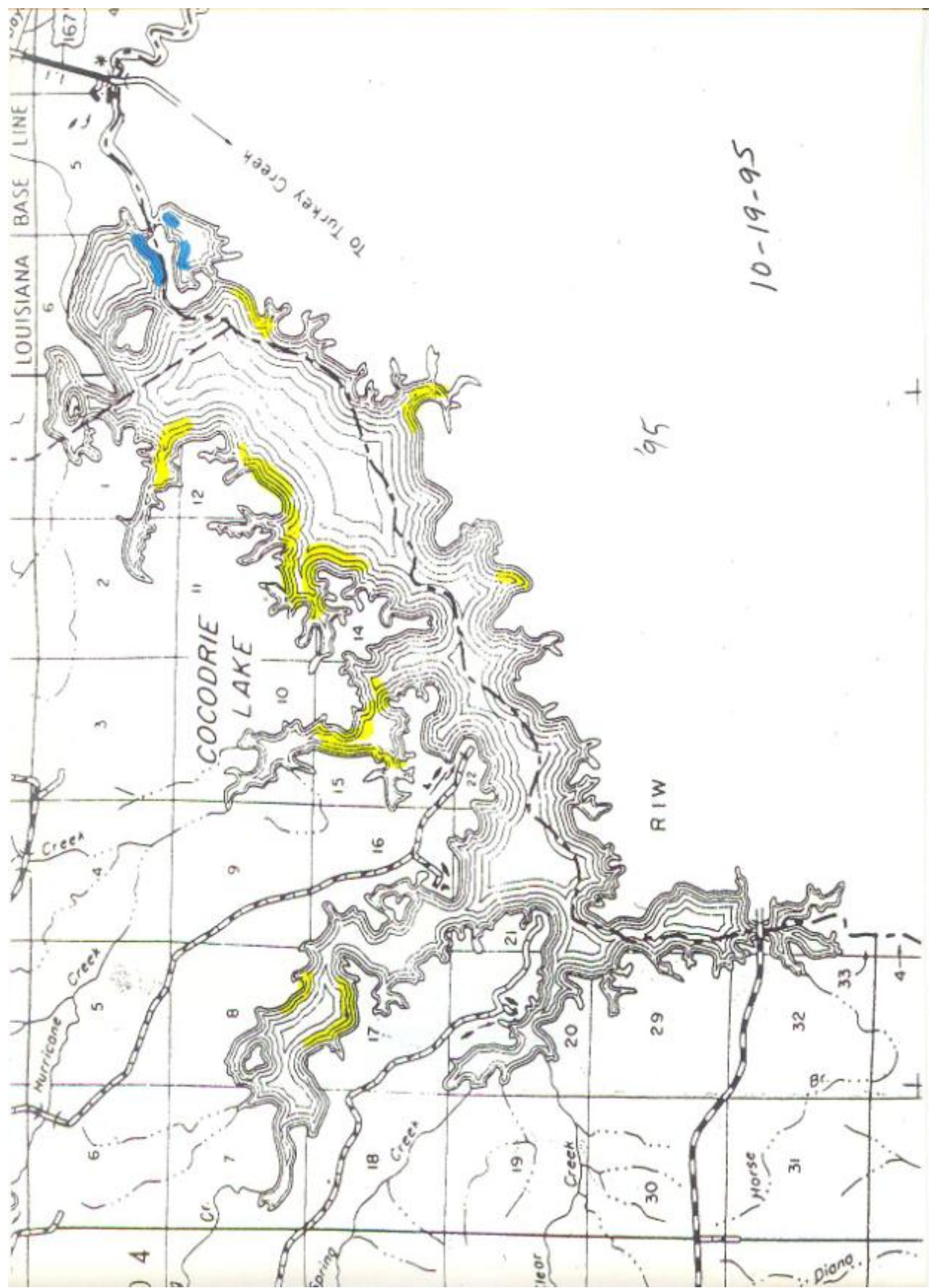
Cocodrie Lake was surveyed October 18, 1995. No serious water weed problems existed in Cocodrie Lake at the time of this visit. Water weed problems were dramatically improved over the 1994 survey period.

In April of 1995 there was an unusually high water situation in Cocodrie Lake. This may have been a significant factor in reducing the overall weed problems.

During this survey, all cove and backwater areas were completely accessible by boat and a number of fisherman were taking advantage of the improved conditions. Free floating coontail and bladderwort sprigs were observed from time to time with an occasional patch of coontail several yards in diameter. The infestation of submergents was very light and at no time posed a problem to water recreation activities.

Water hyacinth were not present in the main body of the lake. These plants were found in the backwater areas along the old channel of Cocodrie bayou where it leaves the lake. Water hyacinth was the dominant aquatic weed, but these plants were restricted to shallow backwater areas which were unusable. One interesting observation was the high population of weevils found on these plants. All of the water hyacinth plants had a very large number of feeding spots on the leaves and at the base of each leaf. These weakened plants had browned out leaves apparently caused from a secondary fungal infection.

Makelm S.



95

10-19-95

COCODRIE LAKE
Survey and Type Map
1998

Cocodrie Lake is located in Rapides and Evangeline parishes. Cocodrie is one of the major inland freshwater lakes in north Louisiana and is approximately 6,100 acres in size according to records of the Louisiana Department of Agriculture and Forestry.

In late June, 1998 the gates were opened on Cocodrie lake to lower water levels for aquatic vegetation control. The pool level of the lake is 51.0 feet msl. Drought conditions during the summer allowed water levels to reach a low of 45.5 msl on August 28th exposing the "flats" to excellent drying. The gates were closed on September 16th and the lake rapidly returned to pool stage.

The southwestern 3/4ths (upper end) of the lake was in excellent condition and no floating aquatic plants were observed during the survey in this area. The waters around Clark's landing, Buck's landing, Bennetts Bay, and the main body of the lake were all problem free. Smartweed, buttonbush, and a few marginal aquatic grasses were found around the lake margin and in shallow backwater areas. Occasionally, a spring or two of coontail or bladderwort could be seen floating near the surface. No submerged aquatics were brought to the surface in this area as a result of random drag sample efforts.

The northeastern 1/4th (lower end) of the lake supported a moderate infestation of water hyacinth, *Eichhornia crassipes*, and salvinia, *Salvinia rotundifolia*. These plants were found in the area of flooded tupelo gum and cypress on both sides of the channel leading to the dam. Infestations of coontail, cabomba, and bladderwort were light in this section of the lake.

In summary, approximately 75% of Cocodrie lake was free of aquatic plant growth. The major aquatic plant problem was water hyacinth which was found only in the lower end of the lake in tree studded areas difficult to reach by boat. The salvinia infestation was also confined to the lower end of the lake. Salvinia was widely scattered in this area and is currently not causing a problem. Submergent weeds were the least abundant of all aquatic vegetation in the entire lake and posed no problems.

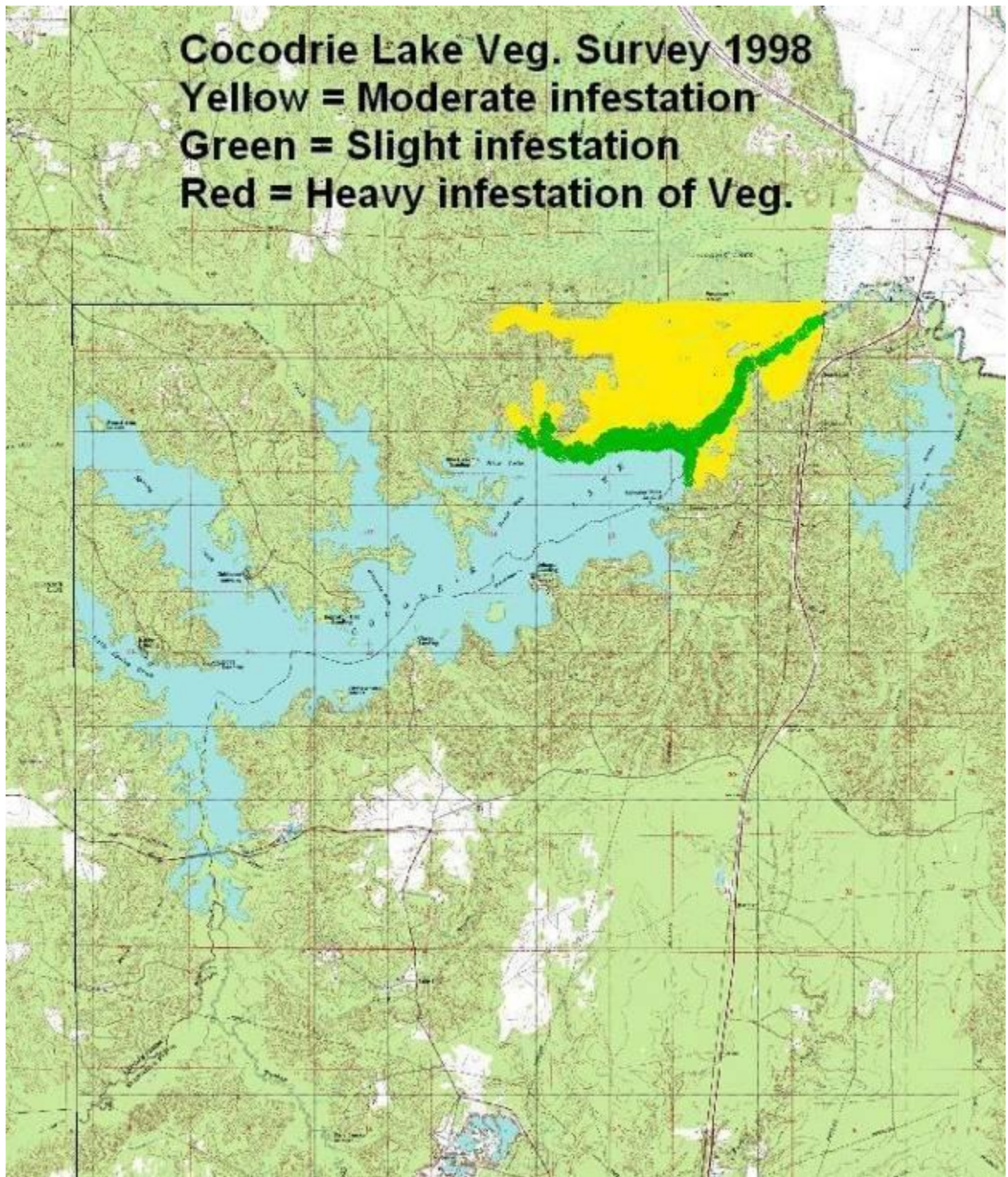
Malcolm Leatherman, Biologist
October 19, 1998

Cocodrie Lake Veg. Survey 1998

Yellow = Moderate infestation

Green = Slight infestation

Red = Heavy infestation of Veg.



Cocodrie Lake
October 1999
Charles N. Dugas

Cocodrie Lake, Evangeline and Rapides Parishes, was surveyed for the presence of aquatic vegetation on October 21, 1999.

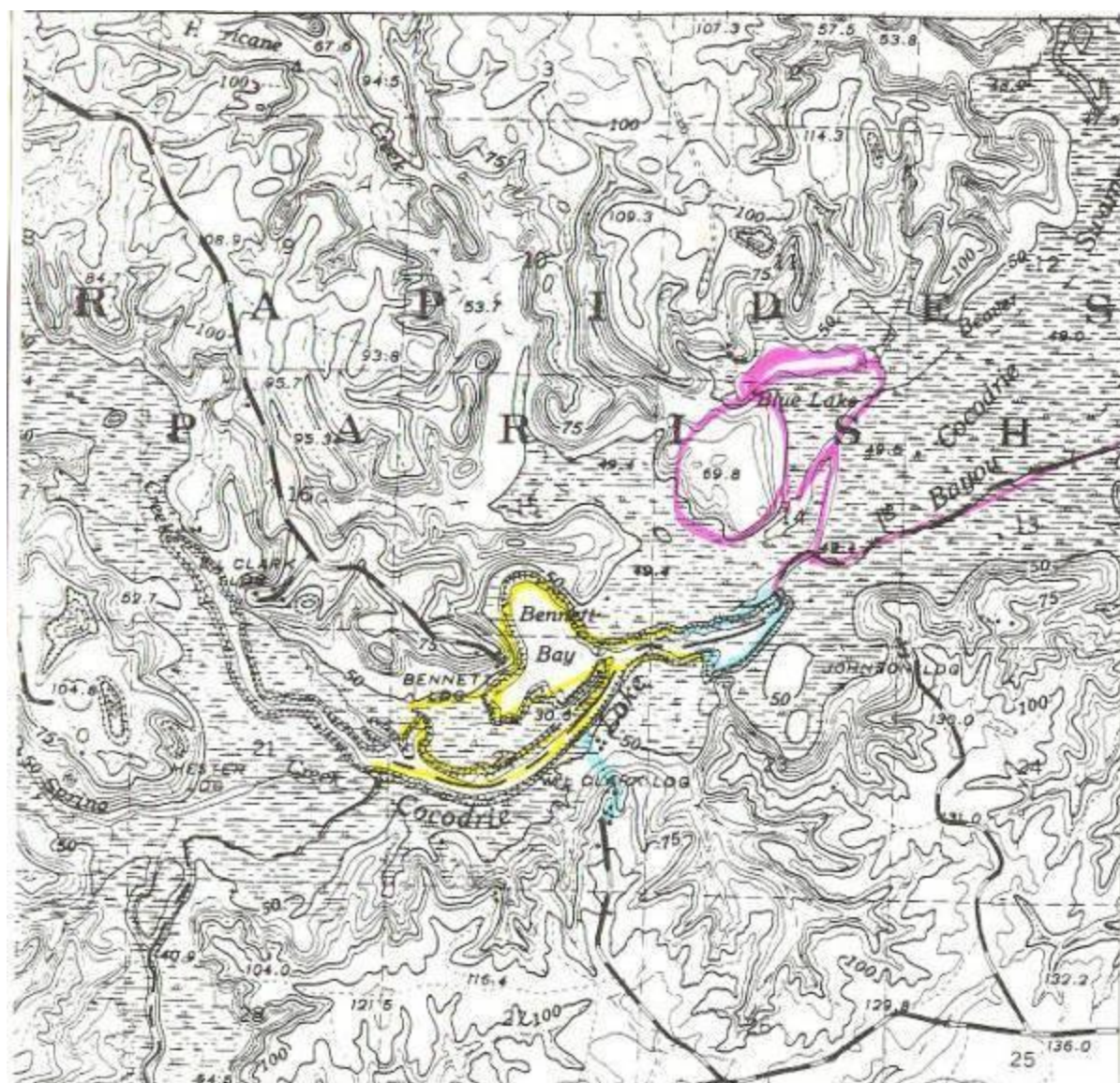
The lake level rose four feet to pool stage during the two weeks before this survey. Therefore, there was very little aquatic vegetation observed. Near Clark's Landing, a few sprigs of parrot's-feather (*Myriophyllum aquaticum*) were observed. Also, in Bayou Cocodrie near the spillway there were light infestations of coontail (*Ceratophyllum demersum*).

Cocodrie Lake
October 2003
Karl A. Mapes

Cocodrie Lake, Evangeline and Rapides Parishes, was surveyed for the presence of aquatic vegetation on October 21, 2003.

The heavy occurrence of coontail, Ceratophyllum demersum, was to be found throughout the lake with dense amounts of common slavinia, Salvinia minima floating on top. Water hyacinth Eichhornia crassipes was found on the spillway end of Bayou Cocodrie along with American lotus Nelumbo lutea. Trace amounts of bladderwort, Utricularia sp., were found at Clark's landing and parrot's feather, Myriophyllum aquaticum was found at Clark's landing and the spillway end of Bayou Cocodrie.

This appears to be the first survey taken since 2000. Coontail was found in the channel of Bayou Cocodrie in 11-12 feet depths. The turbidity remains at 3 feet.



**2005 Aquatic Vegetation Survey
Cocodrie Lake Sep. 23**

Field personnel: M. Plonsky

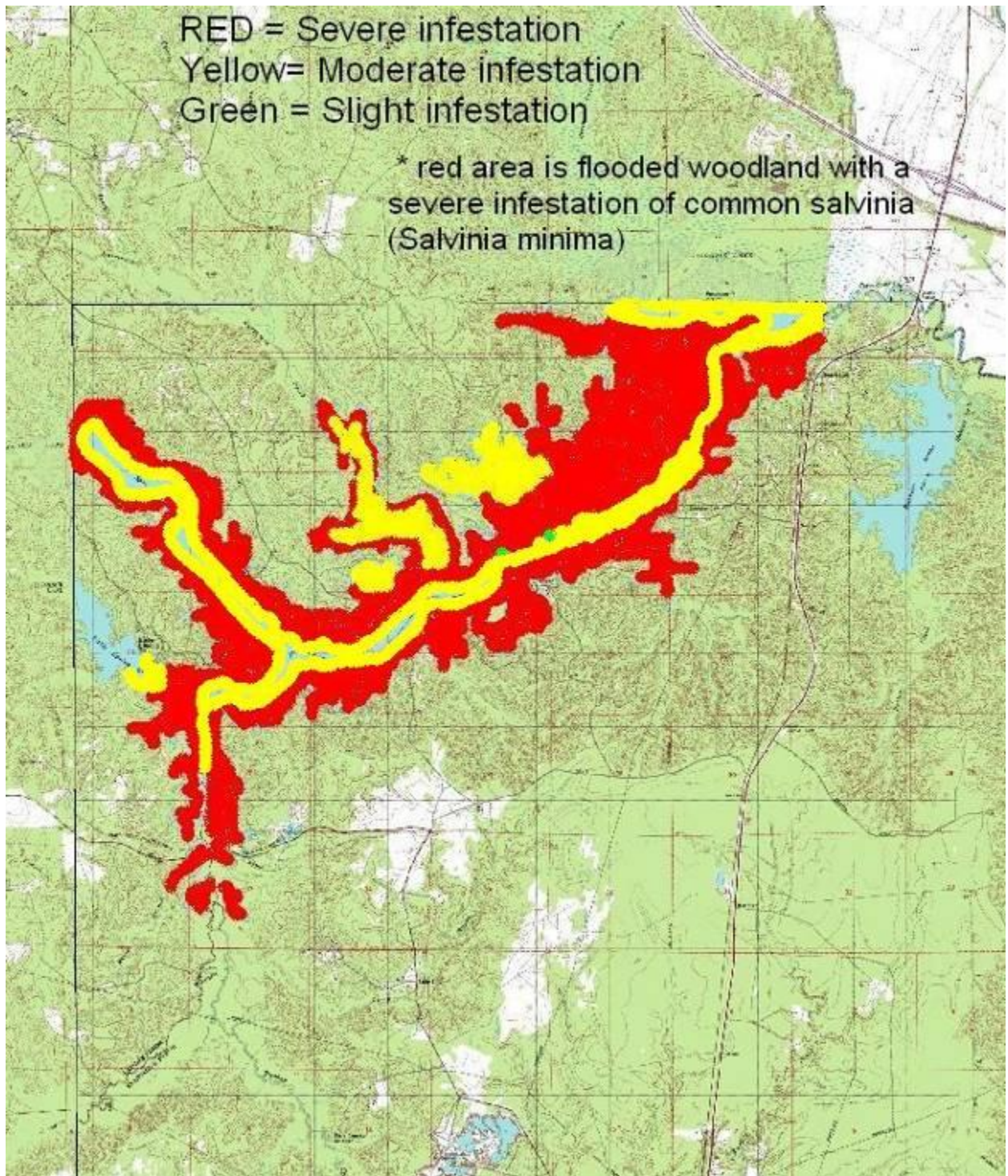
J. David

Report by: M. Plonsky

Cocodrie lake is close to completely covered with common salvinia (*Salvinia minima*) this year. Areas of the lake where common salvinia are not found include the center of the main channel and center locations of Bennett's bay and blue hole. All flooded woodland areas of the lake contain copious amounts of common salvinia and is marked red on the attached map. Other vegetation observed include Common bladderwort (*Utricularia vulgaris*), Cabomba (*Cabomba caroliniana*), Coontail (*Ceratophyllum demersum*), Parrot feather (*Myriophyllum brasiliensis*), Primrose (*Ludwigia* spp.) and White water lily (*Nymphaea odorata*). This vegetation is found in the large shallow coves surrounding the deeper center channel and is marked yellow on the attached map. Small amounts of water-milfoil (*Myriophyllum spicatum*) were seen on the edge of the center channel and this is marked green on the attached map.

RED = Severe infestation
Yellow= Moderate infestation
Green = Slight infestation

* red area is flooded woodland with a
severe infestation of common salvinia
(*Salvinia minima*)



2007 Aquatic Vegetation Survey Cocodrie Lake

Field personnel: M. Plonsky

J. David

Report by: M. Plonsky

Cocodrie lake has less coverage of common salvinia (*Salvinia minima*) this year than the lake displayed in Sep. of 2005. Areas of the lake where common salvinia are not found include the main channel. This is marked in green on the map. Green areas of the map are areas that were treated throughout 06 and 07 with reward. Many of the flooded woodland areas of the lake still contain copious amounts of common salvinia and are marked red on the attached map. The spillway area of the lake displayed slight amounts of vegetation. Other vegetation observed include Common bladderwort (*Utricularia vulgaris*), Cabomba (*Cabomba caroliniana*), Coontail (*Ceratophyllum demersum*), Parrot feather (*Myriophyllum brasiliensis*), Primrose (*Ludwigia* spp.) and White water lily (*Nymphaea odorata*). This vegetation is found in the large shallow coves surrounding the deeper center channel. Coverage by submerged vegetation in these shallow coves is severe and marked in red on the map. Little lake, a deeper cove located on the southwestern edge of the lake has slight to no vegetation.

RED = Severe infestation
Yellow= Moderate infestation
Green = Slight infestation

* red area is flooded woodland with a
severe infestation of common salvinia
(*Salvinia minima*)

**Vegetation
Survey 2007**

